

LEAD STATISTICS

By Carl A. DiFrancesco and Gerald R. Smith

[All values in metric tons (t) unless otherwise noted]

Last modification: December 15, 2003

Year	Primary production	Secondary production	Imports	Exports	Government shipments	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1900	343,000		410	90,000		63,800	253,000	100	2,000	749,000
1901	341,000		490	91,000		54,700	260,000	97	1,900	
1902	342,000		1,400	74,000		63,800	260,000	90	1,700	
1903	343,000		1,600	87,000		32,200	289,000	93	1,700	
1904	367,000		630	77,000		9,700	313,000	95	1,700	
1905	366,000		890	55,000		10,400	311,000	99	1,800	
1906	378,000		11,000	300		11,700	387,000	126	2,300	1,040,000
1907	410,000	23,400	8,400	59,000		4,200	390,000	119	2,100	993,000
1908	422,000	16,800	2,500	90,000		16,800	339,000	93	1,700	1,280,000
1909	426,000	37,300	3,200	90,000		15,800	378,000	95	1,700	1,060,000
1910	449,000	50,200	32,000	78,000		32,600	436,000	97	1,700	1,100,000
1911	465,000	49,200	2,400	120,000		4,070	425,000	97	1,700	1,110,000
1912	457,000	61,000	250	74,000		9,520	439,000	99	1,700	1,160,000
1913	455,000	66,100	38	50,000		4,820	476,000	97	1,600	1,150,000
1914	524,000	55,400	150	81,000		6,960	496,000	86	1,400	
1915	544,000	71,600	410	120,000		11,000	492,000	104	1,680	
1916	517,000	87,400	5,100	110,000		11,200	499,000	152	2,270	
1917	597,000	84,800	5,300	90,000		2,440	606,000	190	2,420	
1918	611,000	88,100	4,800	95,000		428	611,000	157	1,700	
1919	452,000	111,000	4,600	58,000		212	510,000	128	1,210	764,000
1920	506,000	113,000	32,000	24,000		1,200	626,000	181	1,470	804,000
1921	412,000	94,100	28,000	33,000		315	502,000	104	945	783,000
1922	501,000	145,000	3,200	36,000			613,000	126	1,220	972,000
1923	581,000	176,000	19,000	52,000		2,370	724,000	163	1,550	1,080,000
1924	657,000	186,000	74,000	75,000		4,580	840,000	183	1,740	1,220,000
1925	711,000	206,000	9,500	95,000		7,410	829,000	201	1,880	1,410,000
1926	744,000	252,000	74,000	65,000		9,720	1,000,000	186	1,710	
1927	736,000	250,000	0	110,000		8,590	877,000	150	1,400	1,540,000
1928	735,000	280,000	0	110,000		9,720	904,000	139	1,320	1,680,000
1929	724,000	282,000	0	67,000			939,000	151	1,440	1,610,000
1930	603,000	232,000	0	44,000		144,000	791,000	122	1,200	1,520,000
1931	419,000	213,000	0	20,000		198,000	558,000	94	1,010	1,260,000
1932	278,000	180,000	0	21,000		239,000	396,000	70	833	1,050,000
1933	263,000	204,000	0	21,000		268,000	417,000	85	1,070	1,040,000
1934	295,000	189,000	0	5,400		285,000	462,000	85	1,030	1,200,000
1935	308,000	245,000	0	6,300		285,000	547,000	90	1,070	1,380,000
1936	371,000	239,000	0	18,000		223,000	654,000	104	1,220	1,470,000

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1937	447,000	250,000	0	18,000		189,000	713,000	132	1,490	
1938	367,000	204,000	0	42,000		190,000	528,000	104	1,200	1,700,000
1939	457,000	191,000	6,500	68,000		200,000	577,000	111	1,300	1,740,000
1940	508,000	206,000	140,000	68,000		222,000	764,000	114	1,330	
1941	551,000	345,000	250,000	13,000		182,000	1,170,000	128	1,420	
1942	558,000	280,000	340,000	8,800		178,000	1,170,000	143	1,430	
1943	481,000	282,000	220,000	22,000	67,600	234,000	973,000	143	1,350	
1944	470,000	296,000	210,000	14,000	75,700	201,000	1,076,000	143	1,320	
1945	450,000	281,000	210,000	2,000	19,700	245,000	915,000	143	1,300	1,250,000
1946	350,000	313,000	100,000	640	21,100	212,000	816,000	179	1,490	1,030,000
1947	474,000	403,000	160,000	1,400	36,700	199,000	1,090,000	323	2,360	1,310,000
1948	455,000	393,000	250,000	370	-4,530	241,000	1,050,000	398	2,690	1,380,000
1949	515,000	330,000	260,000	880		271,000	1,070,000	339	2,320	1,370,000
1950	510,000	388,000	420,000	2,500		252,000	1,330,000	293	1,980	1,640,000
1951	434,000	401,000	170,000	1,200		206,000	1,050,000	386	2,410	1,600,000
1952	478,000	374,000	480,000	1,600		247,000	1,290,000	363	2,230	1,810,000
1953	477,000	389,000	350,000	730			1,460,000	297	1,810	1,870,000
1954	493,000	386,000	260,000	540		237,000	901,000	310	1,880	2,000,000
1955	490,000	408,000	260,000	370			1,390,000	334	2,040	2,010,000
1956	504,000	404,000	260,000	4,200	96,400	201,000	1,060,000	353	2,110	2,400,000
1957	502,000	392,000	300,000	4,500	141,000	248,000	1,280,000	323	1,880	2,380,000
1958	441,000	311,000	340,000	2,800	-37,800	324,000	975,000	267	1,510	2,350,000
1959	321,000	356,000	250,000	3,600	-40,800	270,000	937,000	269	1,500	2,320,000
1960	210,000	370,000	190,000	5,400		315,000	720,000	263	1,450	2,390,000
1961	430,000	354,000	240,000	11,000		328,000	1,000,000	240	1,310	2,390,000
1962	366,000	357,000	250,000	6,400		263,000	1,030,000	212	1,150	2,510,000
1963	366,000	424,000	210,000	3,600		218,000	1,040,000	246	1,310	2,560,000
1964	408,000	426,000	190,000	21,000	-45,400	179,000	997,000	300	1,580	2,530,000
1965	385,000	450,000	210,000	11,000	-33,100	176,000	1,000,000	353	1,830	2,700,000
1966	410,000	440,000	270,000	5,400		187,000	1,100,000	333	1,670	2,850,000
1967	386,000	433,000	340,000	5,900	-15,200	196,000	1,130,000	309	1,510	2,870,000
1968	487,000	428,000	310,000	8,200	-24,000	186,000	1,200,000	291	1,370	3,010,000
1969	594,000	468,000	260,000	6,400	-20,600		1,320,000	329	1,460	3,240,000
1970	626,000	459,000	230,000	11,000	-10,900	296,000	1,360,000	346	1,450	3,390,000
1971	604,000	444,000	180,000	21,000	9,070		1,210,000	306	1,230	3,490,000
1972	625,000	452,000	220,000	40,000	40,800	240,000	1,260,000	331	1,290	3,450,000
1973	633,000	489,000	170,000	110,000	192,000	194,000	1,420,000	359	1,320	3,490,000

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1974	620,000	545,000	110,000	110,000	241,000	174,000	1,430,000	496	1,640	3,490,000
1975	579,000	512,000	90,000	65,000	6,000	189,000	1,040,000	474	1,440	3,440,000
1976	596,000	564,000	130,000	48,000		150,000	1,280,000	509	1,460	3,690,000
1977	552,000	637,000	230,000	86,000		127,000	1,180,000	677	1,820	3,410,000
1978	568,000	650,000	230,000	67,000		134,000	1,220,000	743	1,860	3,460,000
1979	578,000	673,000	190,000	82,000		191,000	1,130,000	1,160	2,600	3,510,000
1980	548,000	581,000	85,000	240,000		172,000	906,000	937	1,850	3,520,000
1981	498,000	578,000	100,000	59,000		195,000	977,000	805	1,440	3,350,000
1982	517,000	521,000	95,000	56,000		171,000	1,110,000	562	949	3,450,000
1983	515,000	452,000	180,000	20,000		159,000	1,140,000	478	782	3,350,000
1984	389,000	586,000	160,000	22,000		142,000	1,140,000	564	885	3,200,000
1985	494,000	570,000	130,000	27,000		178,000	1,130,000	421	638	3,390,000
1986	370,000	575,000	140,000	13,000		104,000	1,150,000	485	721	3,240,000
1987	373,000	658,000	190,000	10,000		110,000	1,200,000	791	1,140	3,430,000
1988	392,000	691,000	150,000	14,000		105,000	1,230,000	818	1,130	3,420,000
1989	396,000	842,000	120,000	34,000		98,000	1,330,000	869	1,140	3,400,000
1990	404,000	874,000	97,000	64,000		112,000	1,300,000	1,010	1,260	3,370,000
1991	346,000	830,000	120,000	100,000		81,000	1,230,000	739	884	3,260,000
1992	305,000	861,000	200,000	70,000		103,000	1,270,000	774	899	3,200,000
1993	335,000	838,000	200,000	59,000	19,000	95,000	1,340,000	699	788	2,900,000
1994	351,000	877,000	240,000	54,000	65,000	78,000	1,490,000	820	902	2,800,000
1995	374,000	963,000	270,000	57,000	34,000	94,000	1,570,000	933	998	2,710,000
1996	326,000	1,030,000	280,000	61,000	39,000	80,000	1,630,000	1,080	1,120	2,920,000
1997	343,000	1,040,000	272,000	53,000	26,000	101,000	1,610,000	1,030	1,050	3,010,000
1998	337,000	1,060,000	310,000	40,000	50,000	89,000	1,690,000	999	999	3,100,000
1999	350,000	1,060,000	323,000	37,000	61,000	91,000	1,760,000	963	942	3,020,000
2000	341,000	1,080,000	365,000	49,000	32,000	123,000	1,740,000	961	910	3,100,000
2001	290,000	1,040,000	284,000	35,000	41,000	100,000	1,640,000	962	886	3,150,000
2002	262,000	1,070,000	218,000	43,000	6,000	105,000	1,510,000	961	871	2,910,000

Lead Worksheet Notes

Data Sources

The sources of data for the lead worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); and Mineral Commodity Summaries (MCS). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data were not available.

Primary Production

Primary U.S. lead production data report the amount of refined lead. Data were from the MYB and MR for 1900–73 and the MCS for the years 1974–2002. Antimonial lead was included when available as well as desilverized lead and soft lead for the years 1900–05.

Secondary Production

U.S. secondary production was equated to old lead scrap (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose). Undifferentiated scrap numbers were used from 1907–38. Data were from the MYB and MR for the years 1907–73 and the MCS for the years 1974–2002. Blank cells in the worksheet indicate that data were not available for the years 1900–06.

Imports

Import data report the amounts of refined lead imported into the United States in various shapes and forms. Import data exclude all manufactured lead products. Data were from the MYB and MR for the years 1900–73 and the MCS for the years 1974–2002.

Exports

Export data report the amounts of refined lead exported from the United States in various shapes and forms. Export data exclude all manufactured lead products. Data were from the MYB and MR for the years 1900–73 and the MCS for the years 1974–2002.

Government Shipments

Government shipment data were for shipments from the government stockpile. Data were from the MYB and MR for the years 1900–73, and the MCS for the years 1974–2002. Negative numbers for government shipments indicate U.S. Government purchases for refined lead. Blank cells in the worksheet indicate that data were not available for the years 1900–42, 1949–55, 1960–63, 1966, and 1976–92.

Stocks

Stocks for the years 1900–05 include ore and bullion. Stocks for 1956 and before usually include stocks in transit and in process. Beginning in 1956, consumer stocks of scrap were added to secondary smelter stock and scrap, and secondary smelter metal stocks were included with consumer metal stock. Data were from the MYB and MR for the years 1900–73 and the MCS for the years 1974–2002. Blank cells in the worksheet indicate that data were not available for the years 1922, 1929, 1953, 1955, 1969, and 1971.

Apparent Consumption

Data for U.S. apparent consumption are for refined lead and were taken from the MCS for the years 1974–2002. Apparent consumption was estimated for the years 1900–73 by using the formula:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION} + \text{IMPORTS} - \text{EXPORTS} \pm \text{CHANGES IN STOCKS} \pm \text{GOVERNMENT SHIPMENTS.}$$

Unit Value (\$/t)

Unit value is the value in dollars of 1 metric ton (t) of lead apparent consumption. Unit value (\$/t) was estimated for the United States in actual dollars for the years 1900–2002 from prices for domestic refined lead from the MYB and MR for the years 1900–73 and the MCS for the years 1974–2002.

Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

World Production

World production data were for contained lead in world smelter production for the years 1900–54 and for world mine production for the years 1955–98. Data were from the MYB and MR for the years 1900–73 and the MCS for the years 1974–2002. Blank cells in the worksheet indicate that data were not available for the years 1901–05, 1914–18, 1926, 1937, and 1940–44.

References

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